ABSTRACT OF THE DISCLOSURE

In the magnet rotor 1 in which the outer peripheral shape of the back yoke 3 composed of an electromagnetic steel plate or by laminating ordinary thin plates 3a having magnetism is formed in polygon and a permanent magnet 5 is adhered and attached to a fitting plane 4 of the back yoke 3, the permanent magnet 5 does not cause any rotation gap to the back yoke 3. Also, since the back yoke 3 is formed in polygon, only the permanent magnet 5 can be made thicker in a center part without changing a contact width and leak magnetic fluxes between N and S poles, the magnetic flux density is increased and the output is increased. Further, since a sleeve 10 is press-set into a step part 12 of an outer peripheral face of the permanent magnet 5, when the magnet rotor 1 is integrated in a stator 11, a clearance of the permanent magnet 5 and the stator 11 can be reduced and the output can be increased dynamically.